MATH 0304 **NAME:_____**

PRACTICE TEST 1, CHAPTER 2
Beginning and Intermediate Algebra by Elayn Martin-Gay, 4th edition

Simplify each expression.

1. $6x-3y+4x$
2. $5(x+4)$
3. $7(2x+3y-2)$
4. $-(s+7)$
5. $2s-(s+7)$

Solve each equation.

6. $-12=-x+7$
7. $\frac{8}{5}x=-24$
8. $\frac{2}{3}x=8$
9. $2x-4=-3x+1-6$
10. $8(2t+1)=4(7t+7)$

Solve each equation. If it is an identity or a contradiction equation, so indicate.

11. $5(x-7)=3(x-2)+2x$
12. $3(x+4)=3(4+x)$

Translate the words into an algebraic equation. Then solve the equation.

13. Three times a number is the same as the difference of twice the number and seven. Find the number.

14. Twice the sum of a number and eleven is twenty-two less than three times the number. Find the number.

15. The sum of three consecutive even integers is 156. Find the integers.

16. Four times the smallest of three consecutive odd integers is 236 more than the sum of the other two integers. Find the integers.

Solve the equation for the indicated variable.

17. $3x+y=-4$
    a. for x
    b. for y
18. $V=\frac{1}{3}bh$
    a. for h
    b. for b

For each inequality,

a. Solve
b. Graph the solution
c. Write the solution in interval notation

19. $2x-9\le 7x+1$
20. $-4\le 3x-7<8$

Rev. Fall 2012

Math 0304
PRACTICE TEST 1 ANSWERS

1. $10x-3y$
2. $5x+20$
3. $14x+21y-14$
4. $-s-7$
5. $s-7$
6. $x=19$
7. $x=-15$
8. $x=12$
9. $x=-\frac{1}{5}$
10. $t=-\frac{5}{3}$
11. Contradiction
12. Identity
13. $x=-7$
14. $x=44$
15. $50,52,54$
16. $121,123,125$
17. $x=\frac{-4-y}{3}$, $y=-4-3x$
18. $h=\frac{3V}{b}$, $\mathrm{b}=\frac{3\mathrm{V}}{\mathrm{h}}$
19. $x\geq -2$, $[-2,\infty)$
20. $1\leq x<5$, $[1,5)$